ABSTRACT

A sample plate structure is provided including a retainer plate having a central opening, a sample insert plate which fits into the opening, an optional pressure plate and a handle. The handle applies pressure to the sample insert plate to retain it within the retainer plate. The sample insert plate is provided with a peripheral configuration, which assures that the sample insert plate is properly oriented within the sample plate support structure and is held flat. While the sample insert plate can be a consumable, the remaining portion of the apparatus can be reused.